

a1  
cancel  
an Armature of an Electromagnetic Actuator," by Wright and Czimmek, which is hereby incorporated in its entirety by reference.--

**IN THE CLAIMS:**

✓ Please cancel claims 15-17 without prejudice or disclaimer.

Please replace claim 10 as follows:

a2  
10. (Amended) A method of controlling a magnetostrictive actuator, the method comprising:  
energizing a coil with a current to generate magnetic flux within the coil;  
measuring the amount of magnetic flux generated in the coil; and  
applying the amount of magnetic flux generated in the coil as a feedback variable to selectively control the amount of magnetizing force applied to the magnetostrictive member located within the coil, and includes correcting for thermal variations, the correcting for thermal variations includes adding a thermal correction factor to a first setpoint level to generate a second setpoint level, wherein the thermal correction factor is determined based on resistance of the coil.

Please add new claim 18:

a3  
18. (New) A method of controlling a magnetostrictive actuator having a current driver, a coil electrically coupled to the driver and a magnetostrictive member proximate to the coil, the magnetostrictive member being responsive to a magnetizing force generated by the coil, the method comprising:  
measuring a flux set point at a predetermined current level of the coil;  
detecting the amount of change in magnetic flux as compared to the flux set point; and  
applying the amount of change in detected magnetic flux to the current driver as a feedback variable to control the magnetizing force.